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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

MAILED

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Application Number: 10/036,802
Filing Date: December 21, 2001
Appellant(s): FUJII ET AL.

GROUP 3600

Daniel P. Lent
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 8/30/07 appealing from the Office action
mailed 10/12/06.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is not entirely correct.
A correct statement of the status of the claims is as follows:

Claims 9, 11-15, and 24-34 are pending (note that although claims 16-23 were correctly listed as being canceled in the statement of the status of the claims, they were also listed as being pending).

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

It is noted that the amendment after final rejection filed on 8/30/07 (which cancels claims 16-23) has been entered.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,613,821	MUKA et al.	3-1997
5,810,537	BRINER et al.	9-1998
6,068,668	MASTROIANNI	5-2000

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 9, 11-15, and 24-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muka et al (US 5,613,821) in view of Briner et al (US 5,810,537) and Mastroianni (US 6,068,668).

Muka shows a container 32 for receiving dust free articles therein and which is mountable on a loader 60 such that the entire container remains in a low cleanliness room while a cover 42 to be removed from the container faces a high cleanliness room 22, wherein the loader comprises an opening portion 78 disposed in the low cleanliness room in a border location between the high and low cleanliness rooms and a door 80 for opening and closing the opening portion, and further wherein the container comprises an opening port 38 through which the article is transferred to the high cleanliness room, the cover 42 is unified with the door 80 in the low cleanliness room and moves with the

door to open and close the opening portion, and a fixing means 50-56 (fig. 5) fixes the cover to the port when the article is enclosed in the container.

The high cleanliness room is not disclosed as having a higher pressure than the low cleanliness room, nor is a gap around the door to allow air to flow from the high pressure, high cleanliness room.

Briner shows loader 10, stage 12 with movable lift ring 16, container 36 with cover 38, and door 26 in opening portion of wall 24 that separates a low cleanliness room from a high cleanliness room, wherein the high cleanliness room has a higher pressure than the low cleanliness room.

It would have been obvious for one of ordinary skill in the art at the time of the invention to have modified Muka such that the high cleanliness room had a higher pressure than the low cleanliness room, as suggested by Briner, as a means of preventing contamination.

Briner additionally shows the door to have "a slight air gap around its periphery" between it and the opening portion through which air flows out from the high cleanliness room (col. 5, lines 3-19). To have included this additional feature in the apparatus of Muka would have been obvious to further reduce contamination.

Muka also does not show a horizontally movable stage.

Mastroianni shows shuttle 28 for horizontally moving container 38 toward and away from a load port of a wafer processing apparatus. This is disclosed as a desirable alternative to systems without a movable stage.

It would have been obvious for one of ordinary skill in the art at the time of the invention to have further modified Muka by utilizing a driver to move the stage horizontally, as shown by Mastroianni, to enable easier and more precise loading of the container at the load port.

Re claims 11, 26, and 33, note front cover 70 of Muka.

Re claims 12, 25, and 31, see figure 9 of Muka.

Re claim 14, although Muka does not show the container to include a protrusion with a hole in which a pin is inserted to unify the cover and door, a similar structure including recess 186 into which fingers 194 are inserted is shown in figures 13-15. it would have been obvious for one of ordinary skill in the art at the time of the invention to have modified the apparatus of Muka by utilizing a protrusion with a hole in place of the recess, as this would simply be an alternate equivalent design expediency.

Re claim 28, although Muka does not explicitly teach an air cleaning device, the addition of such a feature is considered an obvious design expediency, in light of the fact that: a) Muka is used in a clean environment, and b) such devices are generally well known in this art, particularly since no structural details are recited.

(10) Response to Argument

Appellant argues that Muka fails to show a unifying means in a low cleanliness room, referring to the examiner's statement that the mini-environment 58 in which the unifying means is disposed is in the low-cleanliness room at least part of the time as being technically incorrect. Appellant then cites several passages of Muka and refers to an article in which the term "mini-environment" is defined as evidence that the mini-

environment is a high cleanliness room. Appellant concludes that “mini-environment 58 is exposed to both carrier 32 and load lock 22 during the operation of the device in Muka, at least when the wafers are transferred through mini-environment 58” (emphasis original). The last part of this statement, however, is exactly the examiner’s point, in that the claims do not define the high and low cleanliness rooms with any degree of specificity or in any way require the mini-environment to be a low cleanliness room **when the wafers are being transferred**. (In fact, appellants incorporated this last limitation into claims 9 and 29 in an After-final amendment which was not entered, in an apparent attempt to distinguish the claims over the references). As previously argued by the examiner, the mini-environment is considered to be part of the low cleanliness room, or at the very least lower in cleanliness than the high cleanliness load lock, at least part of the time. Note the examiner’s argument presented in par. 7 of the final rejection, repeated here: In Muka, there is no outer door for the opening in wall 70. Only when the carrier is placed on the stage is this opening closed (by the door 42 of the carrier) and only then is the “mini-environment” sealed. However, note that door 80 is a load lock door which separates load lock 76 from the mini-environment (and the surrounding low-cleanliness environment). Thus, even though the mini-environment may be cleaner than the surrounding environment, it is still a “low cleanliness room” when compared to the “high cleanliness” load lock.

Appellant further argues that calling the mini-environment of Muka a low-cleanliness room and/or modifying it as a low-cleanliness room would render it unsatisfactory for its intended purpose because it would no longer be a particle-free

environment. This is simply not germane to the claimed invention. The examiner never said that Muka would be modified to have the mini-environment replaced with a low-cleanliness room or that the mini-environment would no longer be particle-free. Rather, the examiner's point is that the claims simply do not define the high and low cleanliness rooms in a manner which defines over the examiner's interpretation of the claims, nor do they preclude the mini-environment from being particle free during transfer of the wafers.

In section "B", appellants argue that the examiner has impermissibly relied on personal or common knowledge to suggest a claim limitation, and therefore "seasonably challenge" this supposed reliance and require that a reference be cited in support thereof. This argument is simply not understood. Nowhere did the examiner rely on personal or common knowledge (i.e., take Official notice) that Muka shows a unifying means in the low-cleanliness room. In the passage in question, the examiner was merely further explaining his interpretation of the reference in response to arguments presented by appellants. The examiner cited specific portions of Muka to support his position; it quite simply was not a "personal or common knowledge" rejection.

(Interestingly, in the non-entered After-final amendment the appellants also attempted to categorize the same passage in question as an improper new grounds of rejection).

Furthermore, the final rejection of 10/12/06 merely repeated the previous rejection of 3/01/06. MPEP 2144(C) states that "if applicant does not traverse the examiner's assertion of official notice ... the common knowledge or well-known in the art statement is taken to be admitted prior art". Thus, even if the examiner had taken Official notice (or

Application/Control Number:
10/036,802
Art Unit: 3652

Page 8

equivalent), applicant could and should have traversed it prior to the 10/12/06 Office action. Therefore, the examiner will not provide a reference in response to appellant's request because not only is it inappropriate and based on a factual error, but even if the examiner had relied on traversable personal or common knowledge, the request is untimely.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,


James Keenan

Primary Examiner

Conferees:

Meredith Petravick 

Saul Rodriguez 